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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/533,825 03/24/00 BLANC

R 032326-022

021839 MM92/0705
BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA VA 22313-1404

EXAMINER

BUI, H

ART UNIT	PAPER NUMBER
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2841

DATE MAILED:
07/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/533,825

Applicant(s)

BLANC ET AL.

Examiner

Hung S Bui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 31-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Claims 31-47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected method, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. ~~4~~5.

2. Applicant's election with traverse of the article in Paper No. 5 is acknowledged. The traversal is on the ground(s) that there is nothing in the claims which preclude the interface from being ~~from~~ ^{form} by screening and no ~~series~~ ^{serious} burden has been placed on the examiner to search both the claimed article and method of making the article. This is not found persuasive because, as acknowledged by applicant, the article can be made by numerous methods. ~~As~~ serious burden has been placed on the examiner to search in an art area not normally searched for the article.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the strap must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant fails to provide an adequate description of the strap (page 14, line 22).

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, It is not understood what applicant intends by the support film comprising a strap on the face of the film opposite on the microcircuit.

Regarding claim 14, lines 3-4, there is no antecedent basis for "the ends."

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohtani et al. [US 4,977,441].

Regarding claim 1, Ohtani et al. disclose an electronic chip device (1, see figure 4) comprising an interface support film (8, see column 4, lines 46-52) including a support film and at least one flat conductive interface (6) placed on the support film, said interface support film having such properties that it is capable of being creased or folded over (see figure 5) onto itself without deterioration, and a microcircuit (2) connected to the interface (see column 3, lines 45-50).

Regarding claim 10, Ohtani et al. disclose the polyimide support film (see column 4, line 10).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2-9, 13 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtani et al. in view of Houdeau et al. [US 5,982,628].

Regarding claim 2, Ohtani et al. disclose an electronic chip device (1, see figure 4) comprising an interface support film (8) including a support film and at least one flat

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conductive interface (6) placed on the support film, a microcircuit (2) connected to the interface, and a compensation film (5, see column 4, lines 9-12) placed on the support film, said compensation film having a recess (see figure 4) containing said microcircuit, its connections.

Ohtani et al. disclose the instant claimed invention except for: an encapsulating material encapsulating the microcircuit.

Houdeau et al. disclose a microcircuit (3) connected to a sheet (1) being encapsulated in a casting resin (4).

It would have been an obvious to a person having ordinary skill in the art at the time invention was made to use the encapsulating design of Houdeau et al. in Ohtani et al., for the purpose of protecting the microcircuit.

Regarding claims 3 and 20, Ohtani et al. disclose an electronic chip device (1, see figure 4) comprising an interface support film (8) including a support film and at least one flat conductive interface (6) placed on the support film, a microcircuit (2) connected to the interface, and a compensation film (5, see column 4, lines 9-12) placed on the support film, said compensation film having a recess (see figure 4) containing said microcircuit, its connections.

Ohtani et al. disclose the instant claimed invention except for: an encapsulating material encapsulating the microcircuit.

Houdeau et al. disclose a microcircuit (3) connected to a sheet (1) being encapsulated in a casting resin (4).

It would have been an obvious to a person having ordinary skill in the art at the time invention was made to use the encapsulating design of Houdeau et al. in Ohtani et al., for the purpose of protecting the microcircuit.

Regarding claims 4 and 5, Ohtani et al. in view of Houdeau et al. disclose the instant claimed invention except for: the specific curve radius of the interface relative to the support film.

The specific curve radius of the interface relative to the support film would have been an obvious design consideration based on the specific application of the microcircuit.

Regarding claim 6, Ohtani et al. disclose the instant claimed invention except for: the encapsulating material is contained at least partly by said recess.

Houdeau et al. disclose the casting resin completely surrounding the microcircuit (see figure 2).

It would have been an obvious to a person having ordinary skill in the art at the time invention was made to have the resin completely surround the microcircuit and cavity/recess as suggested by Houdeau et al., for the purpose of completely protecting the microcircuit.

Regarding claims 7 and 8, Ohtani et al. discloses the claimed invention except for the specific thickness of the support film.

It would have been an obvious matter of design choice, absent evidence of criticality shown in the present invention and the lack of implicit or explicit limit to a specific design in the prior art, to change the thickness of the film, since applicant has

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not disclosed that any particular film thickness solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with . It is noted that it is a truism that a claim need not be limited to a preferred embodiment. Ethicon, 93 F.3d at 1582 n.7, 40 USPQ2d at 1027 n.7 (quoting In re Vickers, 141 F.2d 522, 525, 61 USPQ2d 122, 125 (CCPA 1944)).

Regarding claim 9, Ohtani et al. discloses the claimed invention except for the support film having at least one of an elongation at break of more than 80 %, a shore hardness of less than 80, a vitreous transition temperature Tg of less than 0°, and a fusion temperature of less than 130°C.

It would have been an obvious matter of design choice, absent evidence of criticality shown in the present invention and the lack of implicit or explicit limit to a specific design in the prior art, to change the elongation at break, the shore hardness, the vitreous transition temperature Tg or the fusion temperature, since applicant has not disclosed that any particular elongation at break, shore hardness, vitreous transition temperature Tg or fusion temperature solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with elongation at break, shore hardness, vitreous transition temperature Tg or fusion temperature of Ohtani et al. It is noted that it is a truism that a claim need not be limited to a preferred embodiment. Ethicon, 93 F.3d at 1582 n.7, 40 USPQ2d at 1027 n.7 (quoting In re Vickers, 141 F.2d 522, 525, 61 USPQ2d 122, 125 (CCPA 1944)).

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Regarding claim 13, Ohtani et al., as best able to be understood in view of the rejection under 35 USC 112, 2nd paragraph, disclose a strap-type mounting for the interface (see figure 5).

Regarding claim 19, Ohtani et al. disclose the interface having connection pads (see figure 4a, column 4, lines 50-57).

12. Claims 11-12 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtani et al. in view of Houdeau et al. as applied to claim 1 above, and further in view of Masahiko [US 5,852,289].

Regarding claim 11, Ohtani et al. in view of Houdeau et al. disclose the instant claimed invention except for: the interface is aluminum.

Masahiko discloses an aluminum interface (see figure 10, element 106).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the aluminum material interface design of Masahiko for the material interface of Ohtani et al. in view of Houdeau et al., for the purpose of providing reinforcement.

Regarding claims 12 and 16, Ohtani et al. in view of Houdeau et al. disclose the instant claimed invention except for: the interface having turns of conductive material and the microcircuit placed outside the turns.

Masahiko discloses turns (14) mounted on an interface with a microchip (13) placed outside of the turns and in a corner (claim 16, see figure 5) on the interface.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use mounting design of Masahiko for the microchip of Ohtani et al. in view of Houdeau et al., for the purpose of reducing interference.

Regarding claim 14, Ohtani et al. in view of Houdeau et al., as best able to be understood in view of the rejection under 35 USC 112, 2nd paragraph, disclose the instant claimed invention except for: the interface having turns of conductive material and the width of the turns around the microcircuit are thinner than elsewhere in such a way as to connect the microcircuit directly on the ends with a small length of connecting wire.

Masakiho discloses the microchip interface having turns of conductive material thereabout adjusted in such away as to connect the microcircuit to the interface.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a wiring pattern to accommodate the microcircuit, as suggested by Masakiho in Ohtani et al. in view of Houdeau et al., for the purpose of facilitating mounting of the microcircuit.

Regarding claim 15, Ohtani et al. in view of Houdeau et al. disclose the instant claimed invention except for: the interface comprises turns of conductive material and the microcircuit is placed between the turns directly over the support film.

Masakino discloses the interface comprises turns of conductive material and the microcircuit is placed between the turns directly over the support film (see figure 3).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the mounting design of Masakino for the microcircuit of

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Ohtani et al. in view of Houdeau et al., for the purpose of reducing the area occupied by the microcircuit and turns.

Regarding claims 17 and 18, Ohtani et al. in view of Houdeau et al. disclose the instant claimed invention except for: the interface having at least one antenna turn formed in such a way as to be able to communicate.

Masahiko discloses an antenna coil (14) mounted on an interface (see figure 2) formed in such a way as to be able to communicate.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the antenna coil design of Masahiko in Ohtani et al. in view of Houdeau et al., for the purpose of enabling communication.

The specific communication distance would have been an obvious design consideration based on the communication necessary.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtani et al. in view of Houdeau et al. as applied to claim 1 above, and further in view of Moskowitz et al. [US 5,528,222].

Regarding claim 21, Ohtani et al. in view of Houdeau et al. disclose the instant claimed invention except for: the provision of at least one of a protection/personalization film and an adhesive film over at least one of the faces of the device.

Moskowitz et al. disclose a flexible card interface support microchip having at least one of a protection/personalization film and an adhesive film over at least one of the faces of the device.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use one of a protection/personalization film and an adhesive film over at least one of the faces of the device of Ohtani et al. in view of Houdeau et al., for the purpose of readily identifying the device.

14. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtani et al. in view of Houdeau et al. as applied to claim 1 above, and further in view of Grant et al. [US 6,095,416].

Regarding claim 22, Ohtani et al. in view of Houdeau et al. disclose the instant claimed invention except for: a resonance capacitor made up of two conductive plates placed on respective sides of the support film.

Grant et al. disclose a capacitor (see figure 9s) formed by conductive plate (212, 208) on a smart card.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the layers of the interface of Ohtani et al. in view of Houdeau et al., as suggested by Grant et al., for the purpose of providing a capacitor elements in the interface.

Regarding claim 23, Ohtani et al. in view of Houdeau et al. disclose the instant claimed invention except for: a capacitor having an adjustment facility.

Grant et al. disclose an adjustable capacitor (see figures 9a-b).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use an adjustment design of Grant et al. in Ohtani et al. in view of Houdeau et al., for the purpose of providing user controllable function.

15. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtani et al. in view of Tuttle [US 6,037,879].

Regarding claim 24, Ohtani et al. disclose an electronic chip device (1, see figure 4) comprising an interface support film (8, see column 4, lines 46-52) including a support film and at least one flat conductive interface (6) placed on the support film, said interface support film having such properties that it is capable of being creased or folded over (see figure 5) onto itself without deterioration, and a microcircuit (2) connected to the interface (see column 3, lines 45-50).

Ohtani et al. disclose the instant claimed invention except for: the microcircuit containing at least one of an integrated capacitor and an emergency antenna.

Tuttle discloses an interface having a microcircuit including an integrated circuit (16, see column 5, lines 8-37), at least one of an integrated capacitor (48, figure 8) and an emergency antenna (41, 46, see column 5, lines 38-42).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the integrated antenna/decoupling capacitor of Tuttle in Ohtani et al., for the purpose of enabling wireless communication from the device.

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Regarding claim 25, Ohtani et al. disclose the instant claimed invention except for: the microcircuit is powered and can communicate at close range via the emergency antenna if the interface of the support film fails.

Tuttle further discloses a power source (18) for the microcircuit and the microcircuit being selectively actuated (see abstract).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the power source of Tuttle in Ohtani et al., for the purpose of providing power to the microcircuit.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the selective actuation of the microcircuit to send a signal in the event of an emergency.

16. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiko in view of Ohtani et al.

Regarding claims 26 and 27, Masahiko discloses a chip card (1, see figure 12b, column 5, lines 32-35) comprising a card body (21a) on which an electronic chip device (23) is fixed, the card body having an area at least double that of the device (see figure 5), said electronic chip device comprising an interface support (see figure 5).

Masahiko discloses the instant claimed invention except for: the support having such properties that it is capable of being creased or folded over onto itself without deterioration, and a microcircuit connected to the interface.

Ohtani et al. disclose a support for a microcircuit (2) including a support film having such properties that it is capable of being creased or folded over onto itself without deterioration, and a microcircuit connected to the interface.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the film design of Ohtani et al. for the support of Masahiko, for the purpose of enabling the device to be creased or folded over onto itself without deterioration and a microcircuit connected to the interface.

17. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiko (figure 5) in view of Ohtani et al., as applied to claims 26 and 27 above, and further in view of Masahiko (figure 12b).

Regarding claim 28, Masahiko (figure 5) discloses the instant claimed invention except for: the chip card having two external films between which an electronic chip device is sandwiched.

Masahiko (see figure 12b) discloses a chip card having two external films (203a, 203b) between which an electronic chip device (201) is sandwiched.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the film mounting technique of Masahiko (figure 12b) for the film layer of Masahiko (figure 5) for the purpose of protecting the microcircuit.

Regarding claim 29, Masahiko (see figure 5) disclose the instant claimed invention except for: one of the external films forming the card body.

Masahiko (figure 12b) discloses one of the external films forming said card body.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the film design of Masahiko (figure 12b) for the film design of Masahiko (figure 5) for the purpose of reducing components.

Regarding claim 30, Masahiko (figure 5) disclose the instant claimed invention except for: the card body having a cavity in which the microcircuit is located and wherein the support film and the interface extend outside the cavity over the surface of the card body.

Masahiko (figure 12b) discloses the card body (204) having a cavity (see figure 12b) in which the microcircuit (201) is located and wherein the support film and the interface extend outside the cavity over the surface of the card body.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have the film extend over the cavity, as suggested by Masahiko (figure 12b) in Masahiko (figure 5), for the purpose of preventing contaminants from entering the cavity.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S Bui whose telephone number is (703) 305-8024. The examiner can normally be reached on Monday-Friday 8:30AM-5:00 PM.

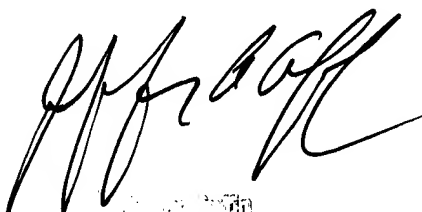
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (703) 308-3301. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 305-0341 for regular communications and (703) 305-0341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0956.

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S. J. Smith
Supervisory Patent Examiner
Technology Center